## CLAIMS

1. In a wireless communication system supporting broadcast transmissions, the system having a broadcast source node and at least one termination node, at least one router coupled between the source node and the at least one termination node, a method for setting up transmission paths comprising:
   determining a transmission range for a broadcast transmission within the system;
   building a multicast tree from a first termination node to the broadcast source node, the multicast tree including the at least one router; and
   transmitting a broadcast message through the multicast tree over the transmission range.

2. The method as in claim 1, wherein building a multicast tree comprises:
   successively registering with neighboring multicast routers between the first termination node and the broadcast source node.

3. The method as in claim 1, wherein transmitting the broadcast message further comprises:
   receiving the broadcast message at the broadcast source; and
   in response to receiving the broadcast message, the broadcast source encapsulating the broadcast message in an Internet Protocol packet to form a multicast Internet Protocol packet.

4. The method as in claim 3, wherein the multicast Internet Protocol packet identifies the broadcast source as a source and identifies a multicast Internet Protocol address as a destination.

5. The method of claim 4, wherein transmitting the broadcast message further comprises:

receiving the multicast Internet Protocol packet at the first termination point;

in response to receiving the multicast Internet Protocol packet the first termination point compresses the multicast Internet Protocol packet to form a compressed packet; and

encapsulating the compressed packet in an Internet Protocol packet to from a compressed packet, the compressed packet identifying the first termination point as a source.

6. A method for processing Internet Protocol packets in a wireless transmission system supporting broadcast transmissions, the method comprising:

receiving an Internet Protocol packet, the Internet Protocol packet encapsulating a broadcast message;

extracting the broadcast message;

encapsulating the extracted broadcast message for transmission.

7. The method as in claim 6, further comprising:

decompressing the broadcast message.

8. The method as in claim 6, wherein encapsulating the extracted broadcast message comprises:

identifying multicast Internet Protocol destination of the broadcast message.

9. An infrastructure element for generating Internet Protocol packets in a wireless transmission system supporting broadcast transmissions, the infrastructure element comprising:

means for determining a broadcast transmission range;

means for generating an Internet Protocol packet, the Internet Protocol packet having a multicast address; and

means for transmitting the Internet Protocol packet.

10. A wireless communication system for processing broadcast transmissions in a wireless communication system, the system comprising:

a packet service data node adapted to receive a broadcast message; and

a packet control function node adapted to receive the broadcast message, the broadcast message encapsulated in an Internet Protocol packet addressed to a multicast address.

11. The system as in claim 10, wherein the packet service data node compressed the broadcast message and frames the compressed broadcast message.

12. The system as in claim 10, wherein the packet control function node processes the broadcast message and forwards the broadcast message to an intended recipient.

13. An infrastructure element for processing broadcast transmissions in a wireless communication system, the infrastructure element comprising:

means for receiving a broadcast message, the broadcast message encapsulated in an Internet Protocol packet, the Internet Protocol packet addressed to a multicast address;

means for processing the Internet Protocol packet; and

means for addressing the broadcast message to an intended recipient.

14. The infrastructure element as in claim 13, wherein the infrastructure element is a packet control function node.

15. The infrastructure element as in claim 13, wherein the multicast address corresponds to intended recipients of the broadcast message.

16. The infrastructure element as in claim 13, wherein the infrastructure element further comprises:

means for transmitting the broadcast message to an intended recipient.

17. An infrastructure element for processing broadcast transmissions in a wireless communication system, the infrastructure element comprising:

means for receiving a broadcast message, the broadcast message encapsulated in an Internet Protocol packet, the Internet Protocol packet addressed to a multicast address;

means for processing the Internet Protocol packet; and

means for preparing a second Internet Protocol packet encapsulating the broadcast message and addressed to a multicast address.

18. The infrastructure element as in claim 17, wherein the infrastructure element is a packet data service node.

19. The infrastructure element as in claim 17, wherein the multicast address corresponds to intended recipients of the broadcast message.

20. A communication path for processing broadcast messages in a wireless communication system, comprising:

a first multicast tree portion, wherein the broadcast message is transmitted addressed to a multicast Internet Protocol address;

a second multicast tree portion, wherein the broadcast message is transmitted addressed to a multicast Internet Protocol address; and

a third portion, wherein the broadcast message is transmitted addressed to at least one unicast address.

21. The communication path as in claim 20, wherein the first multicast tree portion is formed between a content source and a packet data service node, the second multicast tree portion is formed between the packet data service node and a packet control function node, and the third portion is formed from the packet control function node to the base station.